Appln. No.: 10/617,625
Amend/Response filed June 30, 2008
replying to Office Action of Mar. 28, 2008

PATENT
Attorney Docket No. 352000-902002
Customer No. 26379

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

1-16 (**withdrawn**)

17. (**currently amended**) A signal coding apparatus, comprising:

a partitioning component that divides a field of data into a plurality of data groups (macroblocks);

a transform component that encodes respective ones of said plurality of data groups, said data groups represented by respective transform coefficients;

a quantizing component that compresses said respective transform coefficients representing said plurality of data groups in response to a unique estimate for a number of coding bits;

a compressing component that further compresses said quantized transform coefficients; and

a rate control component that maps each of a plurality of unique pairs of data, pairs of data being characterized as a first component of particular class data paired with a second component of particular quantization parameter data, to [[a]] the unique estimate for a number of coding bits in response to the compressed quantized transform coefficients, wherein a value representing an actual quantity of coding bits observed for previously coded data entities is factored into the estimation process.

18. (**original**) The apparatus of claim 17, wherein said features of said groups of data comprises data indicating pixel luminance intensity values and corresponding pixel chrominance intensity values.

19. (**previously presented**) The apparatus of claim 17, wherein said transform component comprises a two-dimensional orthogonal transform.

20. (**previously presented**) The apparatus of claim 17, wherein said compressing component comprises a run-length coder and a variable length coder.

21. (**original**) The apparatus of claim 19, wherein said orthogonal transform comprises a discrete cosine transform operating on one of the intensity values of the pixels of a group of data, and the error of the temporal prediction from one or more temporally local groups of data.

22. (**previously presented**) The apparatus of claim 17, wherein said quantizing component comprises a uniform scalar quantizer.

23. (**withdrawn**)

24. – 27. (**canceled**)

28. (**previously presented**) The apparatus of claim 19, wherein said features of said groups of data comprises data indicating pixel luminance intensity values and corresponding pixel chrominance intensity values.

29. (**previously presented**) The apparatus of claim 20, wherein said transform component comprises a two-dimensional orthogonal transform.

30. (**previously presented**) The apparatus of claim 29, wherein said orthogonal transform comprises a discrete cosine transform operating on one of the intensity values of the pixels of a group of data, and the error of the temporal prediction from one or more temporally local groups of data.

31. (**previously presented**) The apparatus of claim 18, wherein said compressing component comprises a run-length coder and a variable length coder.

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32. (**previously presented**) The apparatus of claim 18, wherein said quantizing component comprises a uniform scalar quantizer.

33. (**previously presented**) The apparatus of claim 20, wherein said features of said groups of data comprises data indicating pixel luminance intensity values and corresponding pixel chrominance intensity values.

34. (**previously presented**) The apparatus of claim 22, wherein said transform component comprises a two-dimensional orthogonal transform.

35. (**previously presented**) The apparatus of claim 22, wherein said compressing component comprises a run-length coder and a variable length coder.

36. (**currently amended**) A signal coding apparatus, comprising:

a partitioning component that divides a field of data into a plurality of data groups (macroblocks), wherein respective ones of said plurality of data groups further comprise a spatial data content;

a transform component that encodes respective ones of said plurality of data groups, said data groups represented by respective transform coefficients, and wherein respective ones of said plurality of data groups further comprise a coding mode;

a quantizing component that compresses said respective transform coefficients representing said plurality of data groups <u>in response to a unique estimate for a number of coding bits</u>;

a compressing component that further compresses said quantized transform coefficients; and

a rate control component that maps each of a plurality of unique pairs of data, pairs of data being characterized as a first component of particular class data paired with a second component of particular quantization parameter data, to [[a]] <u>the</u> unique estimate for a number of coding bits <u>in response to the compressed quantized transform</u>

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<u>coefficients</u>, wherein a value representing an actual quantity of coding bits observed for previously coded data entities is factored into the estimation process.

37. (**previously presented**) The apparatus of claim 36, wherein said features of said groups of data comprises data indicating pixel luminance intensity values and corresponding pixel chrominance intensity values.

38. (**previously presented**) The apparatus of claim 36, wherein said transform component comprises a two-dimensional orthogonal transform.

39. (**previously presented**) The apparatus of claim 36, wherein said compressing component comprises a run-length coder and a variable length coder.

40. (**previously presented**) The apparatus of claim 38, wherein said orthogonal transform comprises a discrete cosine transform operating on one of the intensity values of the pixels of a group of data, and the error of the temporal prediction from one or more temporally local groups of data.

41. (**previously presented**) The apparatus of claim 36, wherein said quantizing component comprises a uniform scalar quantizer.